

## B-7. FOUNDATIONS

Foundations of the building are intended for the transfer of the vertical loads from the walls to the ground. The size of the foundation base is determined by the vertical force acting onto it and the bearing capacity of the soil.

**Armopanel™ Concrete Wall System** is a formwork for reinforced concrete walls, as well as reinforced concrete foundations. Thus, the design of the foundation formwork is done in accordance with common techniques and requirements of the local Building Codes.

In order to reduce labour involved in the aligning of the vertical panels, the foundation base should be leveled within tolerances of approximately 6.0mm (1/4").

When brick-ledge is required to be made in the foundation, the size of the brick-ledge in the vertical direction should be a multiple of 200mm (8"). The length of the brick-ledge should be multiple of 1200mm (48") or 600mm (24") in order to match the **Armopanel™** length and height.

When landscaping requires a brick-ledge to be made in the foundation, the vertical distance to this ledge should be divisible by 200mm (8"). The length of the brick-ledge should be divisible by 600mm (24") or 1200mm (48") in order to match the Armopanel formwork.

Reinforcement of the foundation sections should be spliced in accordance with local building code if reinforcement is necessary. For details refer to the specific project design. Dowels should be installed in compliance with the pattern of vertical reinforcement of the upper wall panel.

Generally, there are two types of patterns for the insertion of dowels:

- 1 – Corner: for the determination of the location of dowels at the crossing of two walls
- 2 – Linear: for the determination of the location of the dowels in straight wall sections as well as door and window openings

Upon completion of foundation, establish a layout of gridlines of the building. This will determine the location of U-guides for the installation of panels.

After alignment of the U-guides, they should be secured to the foundations with screws and dowels.

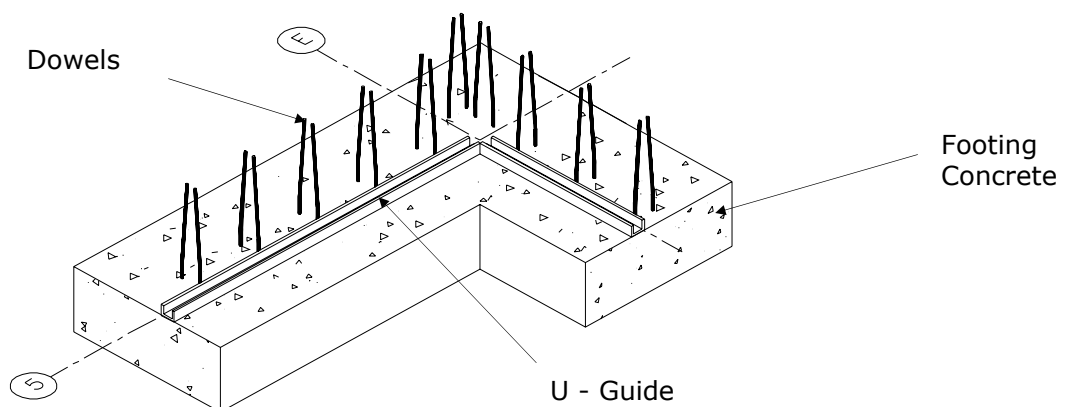
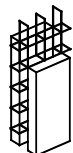


FIG. B-7.1 Detail of Common Footing



If foundations are made from **Armopanel™** foundation panels, the installation sequence is as following:

1. The base width, the diameter and length of the reinforcement dowels are calculated. Reinforcement and dowels should be installed @ 200mm (8") or 400mm (16").
2. The common width of the foundation base is between 400mm (16") and 1000mm (39"). For the specific project, the base width and depth is selected by the designer.
3. The concrete cover for dowels depends on whether lean concrete under the foundation base exists.
4. The size of the foundation panels should be selected according to the specific project.
5. The lean concrete under the foundation panels should be placed within approximately 6mm (1/4") of accuracy.
6. After the placement of lean concrete, establish a layout of gridlines of the building. This will determine the location of U-guides for the installation of foundation panels.
7. **Armopanel™** foundation panels are installed into the U-guides.
8. Concrete is poured to fill the foundation base's height.

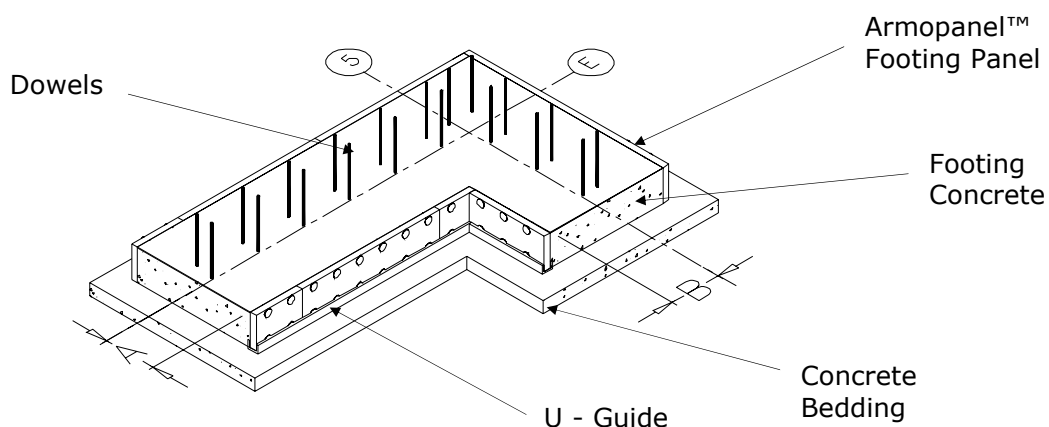


FIG. B-7.2. Detail Footings are made from Armopanel™ Foundation panels

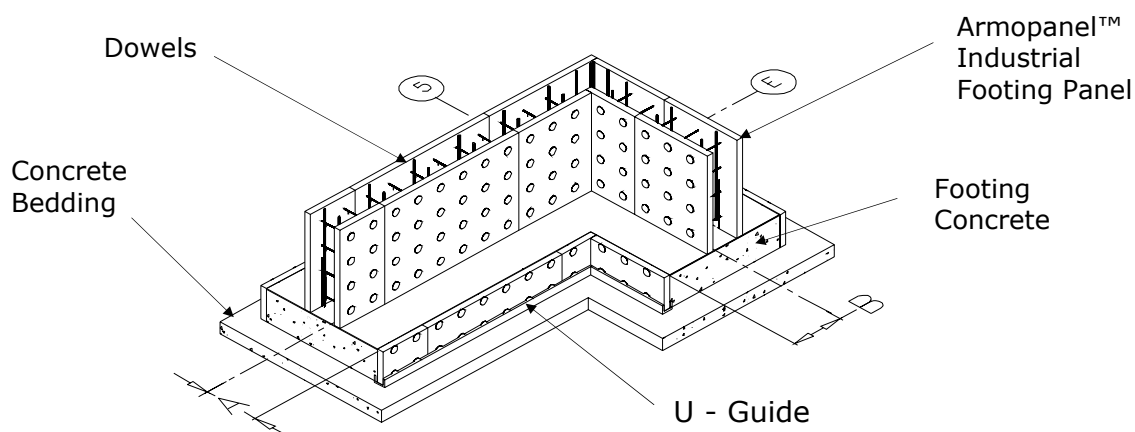


FIG. B-7.3. Detail Footings are made from **Armopanel™** Industrial Foundation panels

